

Title (en)

Nuclear fuel assembly having double enclosure top nozzle subassembly.

Title (de)

Kernbrennstabbbündel mit doppelschaligem Kopfstück.

Title (fr)

Assemblage de combustible nucléaire avec embout supérieur formé d'un double coffret.

Publication

EP 0524491 A1 19930127 (EN)

Application

EP 92111636 A 19920709

Priority

US 73635991 A 19910726

Abstract (en)

A double enclosure top nozzle subassembly (12) for a nuclear fuel assembly (10) includes an upper structure (24) having a top plate (32) and an outer depending peripheral sidewall enclosure (34), a lower structure (26) having a lower adapter plate (58) and an inner upstanding peripheral sidewall enclosure (60) disposed below the top plate (32) and within the outer sidewall enclosure (34). The outer and inner sidewall enclosures (34,60) are slidably movable relative to one another as the top plate (32) moves toward and away from the adapter plate (58). A plurality of resiliently-yieldable biasing devices (30), such as leaf springs extend between and engage the top plate and lower adapter plate. Interengagable structure (28) on the lower and upper edges of the respective outer and inner sidewall enclosures limit movement of the top plate and lower adapter plate away from one another so as to retain the outer and inner sidewall enclosures in sliding contacting relationship together. The leaf springs are movable between compressed and expanded states in response respectively to application and removal of a hold-down force on the upper structure in the direction of the lower structure for permitting and causing movement of the top plate toward and away from the adapter plate and thereby the top nozzle subassembly between compressed and expanded conditions. <IMAGE>

IPC 1-7

G21C 3/12

IPC 8 full level

G21C 3/33 (2006.01); **G21C 3/12** (2006.01)

CPC (source: EP KR US)

G21C 3/12 (2013.01 - EP US); **G21C 3/30** (2013.01 - KR); **Y02E 30/30** (2013.01 - EP US)

Citation (search report)

- [A] EP 0398058 A2 19901122 - WESTINGHOUSE ELECTRIC CORP [US]
- [A] US 4986960 A 19910122 - LARSON JEFFREY G [US]
- [A] EP 0138606 A2 19850424 - WESTINGHOUSE ELECTRIC CORP [US]
- [A] EP 0214895 A1 19870318 - FRAMATOME & CIE [FR]
- [A] US 4671924 A 19870609 - GJERTSEN ROBERT K [US], et al

Cited by

FR2870627A1

Designated contracting state (EPC)

BE CH ES FR GB LI SE

DOCDB simple family (publication)

EP 0524491 A1 19930127; JP H05196767 A 19930806; KR 930003173 A 19930224; TW 223698 B 19940511; US 5180549 A 19930119

DOCDB simple family (application)

EP 92111636 A 19920709; JP 19394892 A 19920721; KR 920013338 A 19920725; TW 81105413 A 19920708; US 73635991 A 19910726